

IN THE CLAIMS

Please Amend the Claims in accordance with the following marked-up copy:

1. (Previously Amended) A semiconductor package comprising:

a semiconductor die having a substantially planar light receiving surface for receiving light from outside of the package, and a substantially planar opposing surface, wherein a plurality of bond pads are disposed on the periphery of the light receiving surface;

a plurality of conductive bumps fused to the bond pads;

a glass having a substantially planar first surface and a substantially planar second surface, wherein a plurality of electrically conductive patterns are formed near the circumference of the second surface, each of the conductive patterns having a first contact in electrical contact with an associated one of the conductive bumps, wherein the glass further includes channels formed between the second surface thereof and an end thereof, and wherein the conductive patterns are formed in the channels; and

a plurality of conductive balls having a diameter greater than a height of the semiconductor die, wherein the conductive balls are each fused to a second contact of an associated one of the electrically conductive patterns.

2. Previously Canceled.

3. (Previously Amended) The semiconductor package of Claim 1, wherein the conductive patterns are patterns etched from a conductive layer deposited on the second surface of the glass.

Claims 4-13 were Previously canceled.

14. (Previously Amended) A semiconductor package comprising:

a semiconductor die having means for receiving light from outside of the package, and a substantially planar surface opposite the means, wherein a plurality of bond pads are disposed on the periphery of the means;

a plurality of conductive bumps coupled to the bond pads;
and

a glass having a substantially planar first surface and a substantially planar second surface, wherein a plurality of electrically conductive patterns are formed near the circumference of the second surface, each of the conductive patterns having a first contact in electrical contact with an associated one of the conductive bumps, wherein the glass further includes channels formed between the second surface thereof and an end thereof, and wherein the conductive patterns are formed in the channels.

15. (Previously Presented) The semiconductor package of Claim 14, further comprising a plurality of conductive balls having a diameter greater than a height of the semiconductor die, wherein the conductive balls are each fused to a second contact of an associated one of the electrically conductive patterns.

Claims 16-17 were previously canceled.

18. (Currently Amended) A semiconductor package comprising:

a semiconductor die having means for receiving light from outside of the package, and a substantially planar ~~planer~~ surface opposite of the means and having a plurality of electrical contacts;

means for connecting signals from the semiconductor die to an external device; and

a glass for permitting light to enter the semiconductor package and pass to the means for receiving light, the glass including means embedded beneath a surface of the glass for connecting the plurality of electrical contacts to the means for connecting signals from the semiconductor die to an external device, and wherein the means for connecting the plurality of electrical contacts to the means for connecting signals is disposed within channels formed between the surface of the glass and an end of the glass.

19. (Previously Presented) The semiconductor package of Claim 1, wherein the channels are etched channels formed in the glass.

20. (Previously Presented) The semiconductor package of Claim 1, wherein the channels are engraved channels formed in the glass.

21. (Previously Presented) The semiconductor package of Claim 1, further comprising an underfill applied around the conductive bumps at the periphery of the semiconductor die and between the semiconductor die and the glass, whereby extraneous material is prevented from reaching the light receiving surface.

22. (Previously Presented) The semiconductor package of Claim 1, further comprising a cover coat applied over the electrically conductive patterns exclusive of the first contact and the second contact of each electrically conductive pattern.

23. (Previously Presented) The semiconductor package of Claim 1, wherein the electrically conductive patterns are coated metal patterns.

24. (Previously Presented) The semiconductor package of Claim 1, wherein the electrically conductive patterns are sputtered metal patterns.

25. (Previously Presented) The semiconductor package of Claim 1, wherein the electrically conductive patterns are vapor deposited metal patterns.

26. (Previously Presented) The semiconductor package of Claim 1, wherein the electrically conductive patterns are copper.

27. (Previously Presented) The semiconductor package of Claim 1, wherein the electrically conductive patterns are aluminum.

28. (Previously Presented) The semiconductor package of Claim 14, wherein the channels are etched channels formed in the glass.

29. (Previously Presented) The semiconductor package of Claim 14, wherein the channels are engraved channels formed in the glass.

30. (Previously Presented) The semiconductor package of Claim 14, further comprising an underfill applied around the conductive bumps at the periphery of the semiconductor die and between the semiconductor die and the glass, whereby extraneous material is prevented from reaching the light receiving surface.

31. (Previously Presented) The semiconductor package of Claim 14, further comprising a cover coat applied over the electrically conductive patterns exclusive of the first contact and the second contact of each electrically conductive pattern.

32. (Currently Amended) New Claim 32. The semiconductor package of Claim 18, ~~further comprising~~ wherein the plurality of electrical contacts comprise a plurality of bond pads, wherein the means for connecting the plurality of electrical contacts to the means for connecting signals comprises a plurality of conductive bumps coupled to the bond pads, and wherein the semiconductor package further comprises means applied around the conductive bumps at the periphery of the semiconductor die and between the semiconductor die and the glass for preventing extraneous material from reaching the light receiving means surface.

33. (Previously Presented) The semiconductor package of Claim 1, further comprising means for covering the electrically conductive patterns exclusive of the first contact and the second contact of each electrically conductive pattern.